

### ABSTRACT OF THE DISCLOSURE

An improved method and system for the determination of jitter buffers enables the generation of buffers having sizes and delays such that, as designed, the buffers capture a substantial majority of packets while not being resource intensive. The present methods and systems provide for improved jitter buffer management by deriving playout buffer adjustments from a plurality of variances, centered around a distribution peak, or mean average delay. The playout buffer monitor uses the buffer adjustments, in size and delay, to select, store and playout packets at their adjusted playout time. The present invention may be employed in a media gateway that enables data communications among heterogenous networks and may be specifically deployed to manage jitter experienced in the course of receiving packetized data and processing the data for further transmission through a packet-based or circuit-switched network.